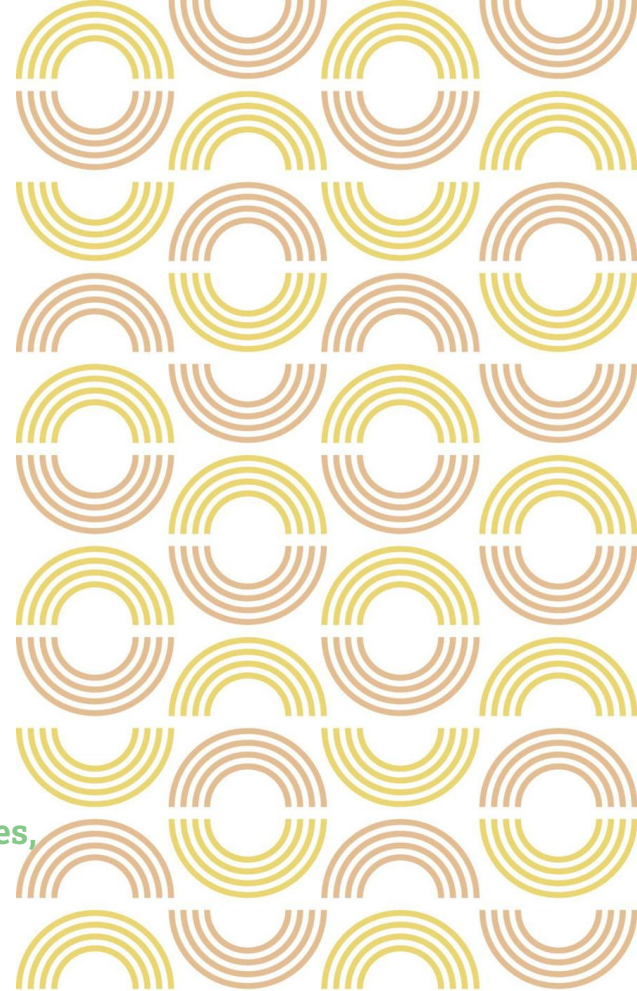




Horizon Europe Brokerage Event  
Cluster 6 Calls 2025

Warsaw, 27 May 2025



## INDECO & REBORN

### *Tracking Progress, Restoring Nature*

*– Integrated Solutions for a Sustainable Bioeconomy –*

Alina BUTU, <https://alina.butu.org/>

National Institute of Research and Development for Biological Sciences,  
Bucharest, ROMANIA, [www.incdsb.ro](http://www.incdsb.ro)



This project has received funding from the European Union's Horizon Europe research and innovation programme, under Grant Agreement No 101059839

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

## Topics addressed:

- HORIZON-CL6-2025-01-CIRCBIO-07: Demonstration, deployment and upscaling of circular systemic solutions in cities and regions (Circular Cities and Regions Initiative)
- HORIZON-CL6-2025-01-ZEROPOLLUTION-04: Towards a comprehensive European strategy to assess and monitor aquatic litter including plastic and microplastic pollution

## Other topics of interest:

- HORIZON-CL6-2025-01-CIRCBIO-06: Indicators for the transition to sustainable and circular economy
- HORIZON-CL6-2025-01-CIRCBIO-09: Unleashing the potential and advancing the impact of digitalization/Artificial Intelligence in climate-neutral bio-based value chains
- HORIZON-CL6-2025-01-ZEROPOLLUTION-03: Environmental biotechnology applications in service of remediation of polluted ecosystems
- HORIZON-CL6-2025-01-ZEROPOLLUTION-05: Cumulative impacts of marine pollution on marine organisms and ecosystems
- HORIZON-CL6-2025-03-GOVERNANCE-04: Operationalisation of bioeconomy sustainability principles





# INDECO – Integrated Indicators for Tracking and Enhancing the Circular Bioeconomy Transition

## Project Overview

Challenge:	Need	Impact Gap	Our Solution
<ul style="list-style-type: none"><li>▲ Current indicators focus on macroeconomic aggregates</li><li>▲ Lack of tools to assess circularity at micro and meso levels</li></ul>	<ul style="list-style-type: none"><li>! Harmonised, multidimensional indicators</li><li>! Tailored to the complexity of circular bioeconomy value chains</li></ul>	<p>Existing frameworks ≠ suitable for</p> <ul style="list-style-type: none"><li>• Local authorities</li><li>• SMEs</li><li>• Bio-based sectors</li></ul>	<ul style="list-style-type: none"><li>✓ Develop robust indicators to guide decisions</li><li>✓ Enable sustainability tracking at all levels</li></ul>

# INDECO – Integrated Indicators for Tracking and Enhancing the Circular Bioeconomy Transition

## ✚ Project Concept & Objectives

Goal	Approach	Key Objectives	Consortium - partners with expertise in
<p>Develop, test &amp; validate a <b>lifecycle-based indicator framework</b> for circular bioeconomy sectors:</p> <ul style="list-style-type: none"> <li> <i>Agriculture</i></li> <li> <i>Forestry</i></li> <li> <i>Fisheries</i></li> <li> <i>Biowaste</i></li> <li> <i>Biorefineries</i></li> <li> <i>Bio-based products</i></li> </ul>	<ul style="list-style-type: none"> <li>✓ Co-creation with stakeholders</li> <li>✓ Alignment with key EU policies: <ul style="list-style-type: none"> <li>• European Green Deal</li> <li>• EU Bioeconomy Strategy</li> <li>• Circular Economy Action Plan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>◆ Harmonised indicators for all governance levels</li> <li>◆ Evidence-based policymaking &amp; business planning</li> <li>◆ Tracking of: <ul style="list-style-type: none"> <li> <i>Circularity</i></li> <li> <i>Sustainability</i></li> <li> <i>Socioeconomic impacts</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Circular bioeconomy policy and practice</li> <li>• Environmental and economic modelling</li> <li>• Regional development and stakeholder engagement</li> <li>• Data science, digital tools, and sustainability metrics</li> </ul>

# REBORN – Remediation of Ecosystems through BIOTEchnology for the Regeneration of Naturesition

## Project Overview

Challenge:	Need	Impact Gap	Our Solution
<ul style="list-style-type: none"><li>▲ Widespread ecosystem degradation (soil, water, sediment, groundwater)</li><li>▲ Pollution from chemicals, plastics, pharmaceuticals</li><li>▲ Climate-related stressors (floods, fires, droughts)</li></ul>	<ul style="list-style-type: none"><li>! Scalable, sustainable solutions for remediation and regeneration</li><li>! Tools adaptable to both chronic pollution and emergency response</li></ul>	<ul style="list-style-type: none"><li>⚠ Conventional remediation methods are limited, costly, and often unsustainable</li><li>⚠ Lack of integrated strategies combining biotech, nature-based approaches, and digital tools</li></ul>	<ul style="list-style-type: none"><li>✅ Develop and deploy bio-based &amp; nature-based solutions (Bb/NbS)</li><li>✅ Integrate AI-driven tools for real-time monitoring and optimisation</li><li>✅ Collaborate with stakeholders for local adaptation and uptake</li></ul>

# REBORN – Remediation of Ecosystems through BIOtechnology for the Regeneration of Naturesition

## ✚ Project Concept & Objectives

Goal	Approach	Key Objectives	Consortium - partners with expertise in
 To restore polluted ecosystems and strengthen their resilience using integrated biotechnology and nature-based innovation.	 Combine microbial biotechnologies, plant-based remediation, and AI-enabled digital platforms   Co-create solutions with public authorities, researchers, companies, and communities   Align with EU policies: Zero Pollution, Biodiversity Strategy, Nature Restoration Law	 Design and validate innovative Bb/NbS across different ecosystem types   Support emergency and long-term remediation planning   Quantify environmental, health, and socio-economic impacts   Enable policy integration and stakeholder adoption across Europe	 Environmental biotechnology and ecosystem remediation   Nature-based solutions for soil and water restoration   AI & digital tools for environmental monitoring and modelling   Sustainability assessment and impact evaluation (environmental, economic, social)   Policy integration and regional governance for Green Deal alignment

## Main expertise offered

- **The expertise possessed by INCDSB** - extensive expertise in biotechnology, environmental science, and the circular bioeconomy // multidisciplinary team integrates biological research, [www.incdsb.ro](http://www.incdsb.ro)

### *Core Expertise Includes:*

- ✓ Microbial biotechnology (e.g., microbial consortia, enzymatic solutions)
- ✓ Bio-based product development and circular bioprocesses
- ✓ Design and application of sustainability and circularity indicators
- ✓ Environmental monitoring (soil, water, biodiversity)
- ✓ Nature-based solutions for land and water remediation
- ✓ Molecular modeling and life cycle impact assessments

- **Involvement in previous/ongoing projects in the area:** <https://www.incdsb.ro/en/proiecte/>
- **Role in projects:** ✓ Open to act as Coordinator or Key Scientific Partner ✓ Lead tasks related to R&I, indicator development, biotechnological solutions, and impact evaluation





## Contact details

Contact person: *Dr. Alina BUTU, Senior Research Scientist*  
Email address: *alina\_butu@yahoo.com*  
Institution Name: *National Institute of Research and  
Development for Biological Sciences*  
Institution type: *Research organization*  
Country: *ROMANIA*

Thank you for your attention!  
Vă mulțumesc pentru atenție!

*alina\_butu@yahoo.com*